IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Lemley, B.
Serial No.:	09/853,126
Filed:	May 9, 2001
Group Art Unit:	2686
Examiner:	DANIEL JR., W. J.
Title:	Integral Navigation Keys For A Mobile Handset

APPLICANT'S DECLARATION UNDER 37 C.F.R. § 1.131

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir/Madam:

I, Brad Lemley, declare as follows:

1. I am the sole inventor of the subject matter described and claimed in United States Patent Application Serial No. 09/853,126, filed May 9, 2001, entitled "Integral Navigation Keys For A Mobile Handset"; the subject matter is disclosed and claimed in the above-referenced patent application.

2. I declare that I conceived invention of the subject matter of the above-referenced application in the United States, as defined by claims 1-15, prior to March 27, 2001.

3. To evidence conception of invention of the subject matter of the above-referenced application in the United States, attached hereto as Exhibit A, please find a copy of the Invention Disclosure entitled "A Method And Apparatus For Combining Multiple User Interface Functions Into A Single Set Of Keys Using A Function Toggle Key In Combination With Prediction Of Intended Function" describing my invention, which was submitted to Kyocera Wireless Corp. Invention Submission System on or about December 20, 2000.

4. I declare that the Invention Disclosure, attached hereto, evidences conception of the invention of the subject matter of the above-referenced application in the United States prior to March 27, 2001.

5. I declare that I exercised due diligence from prior to March 27, 2001 in reducing the invention to practice in the United States by, at the latest, May 9, 2001, which is the filing date of the present application.

6. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine of imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced patent application or any patent issuing thereon.

12/9/2003
Date

Brad Lemley

EXHIBIT A

(COPY OF INVENTION DISCLOSURE ENTITLED: "A METHOD AND APPARATUS FOR COMBINING MULTIPLE USER INTERFACE FUNCTIONS INTO A SINGLE SET OF KEYS USING A FUNCTION TOGGLE KEY IN COMBINATION WITH PREDICTION OF INTENDED FUNCTION")

To: kwc.patents@kyocera-wireless.com
Subject: Invention Disclosure Form

title: A method and apparatus for combining multiple user interface functions into a single set of keys using a function toggle key in combination with prediction of intended function.
purpose: Reduce key space needed for user interfaces which require spatial navigation through menus and text or number entry. Provide a single ergonomic sweet spot for both navigation and text/number entry.
priority: Very High
priority_explain:
In the next few weeks, discussions concerning user interface techniques will be taking place with KWC customers (Sprint). We would like to have a claim on this design/concept before disclosing the idea to customers.
submitter_email:
blemley
invent1_name: Brad J Lemley
invent1_email: blemley@qcpi.com
invent1_phone: 303-247-2011
invent1_suite: Boulder D-105E

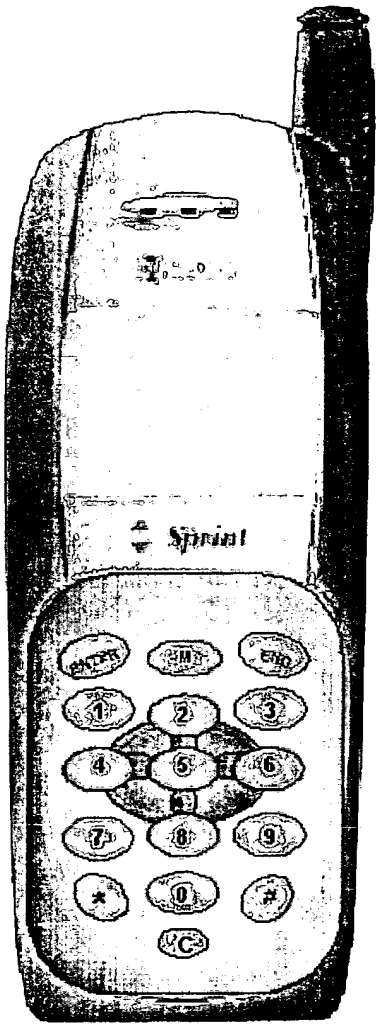
invent2_name:
invent2_email:
invent2_phone:
invent2_suite:
invent3_name:
invent3_email:
invent3_phone:
invent3_suite:

invent4_name:
invent4_email:
invent4_phone:
invent4_suite:
invent5_name:
invent5_email:
invent5_phone:
invent5_suite:

invent6_name:
invent6_email:
invent6_phone:
invent6_suite:
public_use: None.
concept_date: 10/99
practice_date:
construct_start_date:
construct_end_date:

contract:
contract_project:
contract_acct:
funded: Yes
funded_project:
funded_acct:
operating_environ:
The invention is expected to be used as the keypad and associated user interface for a cellular phone. In general, the invention could be used on any handheld device which requires user input for both menu navigation and data (numbers and letters) input.
info_sources:
background: Phones had separate sets of keys for a navigation and number/text entry...both a number keypad and a separate set of navigation keys.
operation: See document "KeypadUI.doc".
misc: I'm not sure how much of this is patentable...maybe the concept of "toggling" between navigation and number/text entry functions of the keys.

BRAD LEMLEY



Key Map
Enter = Send/Enter/Select
End = End/Exit/Back
M = Menu/Toggle
C = Clear/Exit/Back

The combined navigation/number keypad functions as either a navigation pad or a number/text entry pad. The function of the keys (either as number/text or as navigation-up,down-left-right) is semi-predictive, or user-controlled, depending on the user's position in the Menu Structure.

In some scenarios, key the intended key function can be predicted. For instance, if the user navigates to a position in the menu where number or text entry is required, the keypad automatically reacts as a number/text pad once the user has selected a function which requires text or number entry. Or, when the phone is first powered up, the keypad functions as a number entry pad as on a standard-type cell phone, allowing the user to enter a phone number and press Enter (Send) to make a call without any extra navigation. (To enter the menu structure from this "startup" point, the Menu key is pressed.)

In some scenarios, user control of the key function is required. For instance, when a user enters a menu position where text or number entry is required, a user may want to "navigate" up in the text to correct or add text. In this situation, the user controls the function of the keys by using the Menu key as a "toggle" key: a) enter text as normal using the number/letter keys, b) to navigate to an earlier spot in the text, press the Menu key (which toggles to navigation mode) and navigate to the desired location, c) to edit at that point, again press the "Menu" key and enter/edit text, and d) repeat this procedure toggling back and forth between navigating and entering.

Send and End keys can also be used as "Enter" and "Back" respectively.

An icon may be displayed to indicate which function is currently being "understood" by the phone. For example, in Navigation mode, an arrow may be displayed in the lower right hand corner of the screen...when the user switches (or phone predicts) to Entry mode, the icon changes to an "A" or "4" or something.